

Name: \_\_\_\_\_

**at1113exam: Expand, factor, and solve quadratics (v216)**

1. Expand the following expression into standard form.

$$(3x + 5)^2$$

2. Solve the equation.

$$(5x + 8)(4x + 3) = 0$$

3. Expand the following expression into standard form.

$$(9x + 4)(5x + 3)$$

4. Expand the following expression into standard form.

$$(4x - 3)(4x + 3)$$

5. Factor the expression.

$$9x^2 - 49$$

6. Solve the equation with factoring by grouping.

$$10x^2 - 8x + 15x - 12 = 0$$

7. Factor the expression.

$$x^2 - x - 56$$

8. Solve the equation.

$$10x^2 - 60x + 67 = 3x^2 - 2x + 4$$